

MONTHLY WEATHER REVIEW.

Editor: Prof. CLEVELAND ABBE.

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INTRODUCTION.

The REVIEW for November, 1895, is based on reports from 2,759 stations occupied by regular and voluntary observers, classified as follows: 149 from Weather Bureau stations; 35 from U. S. Army post surgeons; 2,416 from voluntary observers; 33 from Canadian stations; 96 received through the Southern Pacific Railway Company; 30 from U. S. Life-Saving stations; international simultaneous observations are received from a few stations and used together with trustworthy newspaper extracts and special reports.

The WEATHER REVIEW is prepared under the general editorial supervision of Prof. Cleveland Abbe. Unless otherwise specifically noted, the text is written by the Editor, but the statistical tables are furnished by Mr. A. J. Henry, Chief of the Division of Records and Meteorological Data. A special acknowledgment is made of the hearty cooperation of Prof. R. F. Stupart, Director of the Meteorological Service of the Dominion of Canada.

CLIMATOLOGY OF THE MONTH.

GENERAL CHARACTERISTICS.

During November the mean temperature was in excess throughout the Atlantic States and Lake Region. The precipitation was also in excess in New England and thence westward over the Lake Region and Ohio Valley. The principal storm of the month was that which passed from the Gulf States on the 24th northeastward over the Lake Region on the 25th, and with respect to which a special bulletin was published. Local storms, properly so-called, such as belong especially to the warm season of the year, were not reported during November. The drought that has prevailed during some months throughout the Mississippi basin was ended by the general rain of this month but, on the other hand, precipitation was below the normal in the Rocky Mountain and Pacific Coast regions. The auroral display between the 9th and 12th was reported as one of the brightest on record. The rivers continued near or below the low water mark, but the Ohio rose slightly. The Mississippi in Minnesota and the Missouri in North and South Dakota were generally frozen over before the close of the month.

ATMOSPHERIC PRESSURE.

[In inches and hundredths.]

The distribution of mean atmospheric pressure reduced to sea level, as shown by mercurial barometers, not reduced to standard gravity, and as determined from observations taken daily at 8 a. m. and 8 p. m. (seventy-fifth meridian time), is shown by isobars on Chart II. That portion of the reduction to standard gravity that depends on latitude is shown by the numbers printed on the right-hand border.

The mean pressures during the current month were highest in the middle Plateau Region, and nearly as high in the middle portion of the Appalachian region. A region of high pressure extended from Oregon southeast to the Gulf of Mexico and thence northeast to Newfoundland. The highest were: Idaho Falls, 30.25; Lander, 30.24; Winnemucca and Salt Lake City, 30.22; Carson City, Knoxville, Chattanooga, Raleigh, Lynchburg, Washington, and Harrisburg, 30.21;

Parkersburg, 30.20. Mean pressures were lowest in Arizona, and also in Manitoba and Saskatchewan. The lowest were: Yuma, 30.00; San Diego and Los Angeles, 30.02; Havre, 30.05; St. Vincent, Duluth, and Marquette, 30.06.

As compared with the normal for November the mean pressure was in excess throughout the Lake Region and Atlantic States. The greatest excesses were: St. Johns, 0.19; Sydney, 0.18; Eastport, 0.17; Halifax and Bermuda, 0.16. Pressures were slightly deficient in the Plateau Region and middle Rocky Mountain Slope; the greatest deficits were: Calgary, 0.05; Havre, 0.04; San Diego and Rapid City, 0.03.

As compared with the preceding month of October, the pressures, reduced to sea level, show a decided rise over the Rocky Mountain and Pacific Coast regions, and a still larger rise over the Atlantic States and Lake Region. The greatest rises were: Eastport, 0.16; Portland, Me., and Nantucket, 0.15; Northfield, Boston, Block Island, New Haven, Sault Ste. Marie, and Yuma, 0.14. The greatest falls were: Concordia, 0.04; Kansas City, Springfield, Mo., Wichita, Dodge City, Havre, and Tatoosh Island, 0.03.

AREAS OF HIGH AND LOW PRESSURE, NOVEMBER, 1895.

By Prof. H. A. HAZEN.

The accompanying table exhibits some of the salient features of the place of origin and disappearance of highs and lows during November, whereas Charts I and IV show the paths in detail. There were but four highs and ten lows during the month of sufficient definiteness to be numbered. In previous studies of these conditions (WEATHER REVIEW, 1888, p. 246, and 1890, pp. 173, 174), I have shown that the velocities of the high and succeeding low have been fairly comparable, and seemed to show a common cause for the movement. During the current November, however, there is no similarity whatever in the figures. The average duration of highs has been 9.4 days, and of lows only 2.2 days. The velocities were 21, and 34 miles per hour, respectively, for the two conditions.